# Operating Instructions Model: PRT-W

Ref: PRT-W Rev: 1.0

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#### Installation Procedure

Mount the thermostat at eye level.

#### Installation



Carefully separate the front half of the thermostat from the back plate by placing a small flat head terminal driver in to the slots on the bottom face of the thermostat.



Fix the back plate to the wall. Clip the front of the thermostat to the back plate.

#### Installing the Batteries

2 AAA batteries are supplied with the thermostat.



To access the battery holder, push and release the compartment door (located on the bottom face of the thermostat)

Install the batteries in the holder, following the polarity of the batteries. Then push the

holder back inside the thermostat.

You should replace the batteries in the thermostat when the battery icon is displayed on the LCD. Once you have taken the batteries out of the thermostat, ensure you replace the batteries within 1 minute in order to retain the current clock setting.

# Using a Standalone Receiver (RC1)

With the thermostat turned off

- Press the Clock button until the LCD comes on.
- You will now see a small number 01 in the top right corner of the LCD. This is feature 01
- Press Clock repeatedly until you see feature 06 00= UH1-W 01= Standalone receiver
- Use the Up/Down keys to set feature 06 to 01
- Press Clock again until you see feature 07
   01-32 Receiver Address (RF is disabled if receiver Address is set to 00)
- Use the Up/Down keys to set feature 07 to 01 (You should set a unique receiver address for each receiver installed)

 Press Clock again until you see feature 08 01-02 Zone Number

You are able to connect two DT-W / PRT-W to one receiver. You should select which zone this thermostat controls.

Press A to accept, the display will now go blank.

#### Pairing the thermostat

- On the receiver, press and hold the pairing button until the Comms LED comes on
- Turn off the thermostat by holding down the power button.
- On the thermostat, press the A key for 5 seconds. The thermostat will send a signal for 1 minute, and will flash the RF signal icon.

- If successful, the receiver will flash the Comms LED.
- Press the Pairing Button on the receiver to store
- If the pairing is unsuccessful, reposition the thermostat and try again.

# **Using the UH1-W Wiring Centre**

With the thermostat turned off

- Press the Clock button until the LCD comes on.
- You will now see a small number 01 in the top right corner of the LCD. This is feature 01
- Press Clock repeatedly until you see feature 06
   00= UH1-W 01= Standalone receiver
- Use the Up/Down keys to set feature 06 to 00

- Press Clock again until you see feature 07 01-09 UH1-W Address (RF is disabled if receiver Address is set to 00)
- Use the Up/Down keys to set feature 07 to 01 (You should set a unique address for each UH1-W installed)
- Press Clock again until you see feature 08
   01-08 Zone Number.

   The UH1-W is an 8 zone receiver.
   Select the zone this thermostat should be linked to.

# **Icons Explained**

Heating On	$\boldsymbol{\flat}$
Heating Off – Frost Mode	*
Key Lock	<b>a</b>
RF Signal Active	(·l <sub>3</sub> )
Battery	(गार
Holiday Active	

#### **Temperature Display**

**Room Temp** = This is the current room temperature.

**Set** = This is the temperature you are trying to achieve in your home.

# **Setting the Clock**

To set the clock, follow the steps below.

- With the thermostat turned on, press the Clock button twice
- You are now able to set the hours using the Up/Down keys
- Press H to accept
- You are now able to set the minutes using the Up/Down keys
- Press H to accept
- You are now able to set the day of the week using the Up/Down keys

Press A to store and exit

#### **Locking the Thermostat**

The thermostat has a key-lock facility. To enable, follow these steps;

- Press and hold the A and Down key for 10 seconds
- You will see the lock symbol appear
- To unlock, repeat the steps above.

#### **Comfort Levels Explained**

The thermostat provides Weekday/Weekend or 7 Day programming. You should consult the Configuration Menu section to select the required mode.

The thermostat is supplied with comfort levels already programmed, but these can be changed easily. The default times are;

```
08:00 – 21C (Wake)
09:30 – 16C (Leave)
16:30 – 22C (Return)
23:00 – 17C (Sleep)
```

If you only want to use 2 levels, you should program the unused levels to --.—

- To begin programming the comfort levels, press Clock Once
- If your thermostat is setup for Weekday/Weekend programming, you will see Mon-Fri shown. For 7 day programming you will see Monday, you need to use

- Up/Down arrow keys to select which day you would like to program and then press H key to confirm
- Using the Up/Down arrow keys, enter the required Wake time
- Press H
- Using the Up/Down arrow keys, enter the required Wake temperature
- Press H
- You will see Leave
- You should repeat the programming for each period, entering --. —for unused periods.

Note: For weekday/weekend programming, the 4 comfort levels are the same for all weekdays. For 7 day programming, each day can have 4 different comfort levels.

#### **Temperature Hold**

The temperature hold function is ideal for parties or when you will be going out for a number of hours. It allows you to hold a temperature for a desired period.

- Press H
- Using the Up/Down arrow keys enter the required hold time
- Press H
- Using the Up/Down arrow keys enter the required hold temperature
- Press A to accept

You will see the Hold indication is displayed which will countdown the hold duration. To cancel, reduce the Hold time to 00 hours

#### **Temperature Set**

Using the Up/Down arrow keys allows you to adjust the set temperature. When you press either of these keys, you will see the word SET and the desired temperature.

Press A to accept.

# Heat On/Off

Frost Protect: Pressing the power button once will place the thermostat in frost protect mode. In this mode, the thermostat will display the frost icon and will only turn the heating on should the room temperature drop below the set temperature. Should the heating be turned on whilst in frost mode, the flame symbol will be displayed. To cancel the frost protect mode, press the power button.

#### Thermostat off:

To turn the thermostat off completely, press and hold the power button. The display and heating output will be turned off. To turn the thermostat back on, press the power button.

#### Holiday

The thermostat has a holiday function. This allows you to enter a holiday setting. During a holiday, the thermostat will maintain the frost set temperature. At the end of your holiday, the thermostat will revert back to the programmed setting ensuring that your home is warm on your arrival.

- Press H three times (Until you see the suitcase)
- Using the Up/Down arrow keys, enter the number of days holiday
- Press A to accept

The thermostat will show a suitcase indicating the thermostat is in holiday mode. To cancel, reduce the Holiday duration to 00 days.

#### **Factory Reset**

The thermostat has a factory reset function. This will reset all settings back to their factory default. To perform a factory reset, follow these steps;

- Turn the thermostat off
- Press and hold the Power and Up arrow key until the LCD powers up. All of the icons will be displayed. When they have disappeared, the thermostat has been reset.

# THE FOLLOWING SETTINGS ARE OPTIONAL AND IN MOST CASES NEED NOT BE ADJUSTED

# **Optional Features Explained**

**Feature 01 – Temperature Format:** This function allows you to select between C/F

**Feature 02 - Switching Differential**: This function allows you to increase the switching differential of the thermostat. The default is 1C which means that with a set temperature of 20C, the thermostat will switch the heating on at 19C and off at 20C. With a 2C differential, the heating will switch on at 18C and off at 20C

**Feature 03 – Frost Protect:** You can set whether the thermostat will maintain the frost temperature when the thermostat display is turned off. As a default, this is enabled

**Feature 04 – Frost Protect Temperature:** This is the temperature maintained when the thermostat is in frost mode. The range is 07-17C. The default is 12C and is suitable for almost all applications.

**Feature 05 – Output Delay:** To prevent rapid switching, an output delay can be entered. This can be set from 00-15 minutes. The default is 00 which means there is no delay.

**Feature 06 – UH1-RF or Standalone Receiver:** The thermostat can work with our UH1 or standalone receiver. This setting determines which is being used.

**Feature 07 – Receiver Address:** Within one building, up to 9 UH1s or 32 standalone receivers can be used. Each receiver must have a unique receiver address.

**Feature 08 – Zone Number:** This zone number relates to either the zone number on the accompanying UH1 or the standalone receiver.

Feature 09 – Underfloor Heating or Radiator Zone (UH1 Only): This setting determines whether the thermostat will active the pump relay on the UH1

#### Feature 10 - Fail Safe

If enabled, the thermostat will send a signal to the receiver every 20 minutes. Should the receiver fail to receive two signals, the receiver will activate the output for 20% of the time. This is to protect the system against a loss of wireless signal or should the thermostat battery fail whilst you are away.

#### Feature 11 - Up/Down Temperature Limit

This function allows you to limit the use of the up and down temperature keys. This limit is also applicable when the thermostat is locked and so allows you to give others limited control of the heating system.

Feature 12 – Not used on this model Feature 13 – Not used on this model

**Feature 14 – Optimum Start** Optimum start will delay the start up of the heating system to the latest possible moment to avoid unnecessary heating, so that the dwelling is comfortably warm by the programmed time. The thermostat uses the rate of change (see below) setting to calculate how long the building needs to take to raise the building 1C (with a rate of change of 20, the thermostat has calculated the building needs 20 minutes to raise the building 1C)

#### Feature 15 - Rate of Change For information only

**Feature 16 – Programming Mode** The thermostat offers two programming methods. Weekday/Weekend allows you to program 4 comfort levels for the weekday and 4 different comfort levels for the weekend. In 7 day program mode, each day has 4 comfort levels that can be programmed independently.

# **Adjusting the Optional Settings**

- To access the configuration menu, turn off the thermostat by pressing and holding down the power button.
- Press and hold down the Clock button until the display comes on.
- The small number is the feature number, the large number is the setting value
- 4. Use the clock button to cycle through the features.

- 5. Use the Up/Down keys to change the setting.
- 6. Press A to accept and store.

# **Feature Table**

Feature	Description	Setting
01	Temperature Format	00=C
		01=F
02	Switching Differential	01-03C
		00C Default
03	Frost Mode	00= Disabled
		01 =Enabled
		(01= Default)

04	Frost Temperature	07-12C
04	1103t Temperature	00
		(12C Default)
05	Output Delay	00-15 Minutes
		(00 Default)
06	UH1-RF or Standalone	00= UH1-RF
	Receiver	01= Standalone
		00 = Default
07	Receiver Board	UH1-RF = 01-09
	Address	Standalone = 01-32
		00 Default
08	Zone Number	UH1-RF = 01-08
		Standalone = 01-02

09	Underfloor Heating or Radiator (UH1 Only)	Underfloor Heating = 00
		Radiator Zone = 01
10	Fail Safe	00 Disabled
		01 Enabled
		Default 00
11	Up / Down Temp	00-10c
	Limit	00 Default
12	Sensor Selection	Fixed on built in
		sensor
13	Not used	Not used

14	Preheat Setting	00-03 hours 00 default
15	Rate of Change	Non adjustable
16	5/2 Day or 7 Day	00 = 5/2 day
	Programming	01 = 7 day
		00 default